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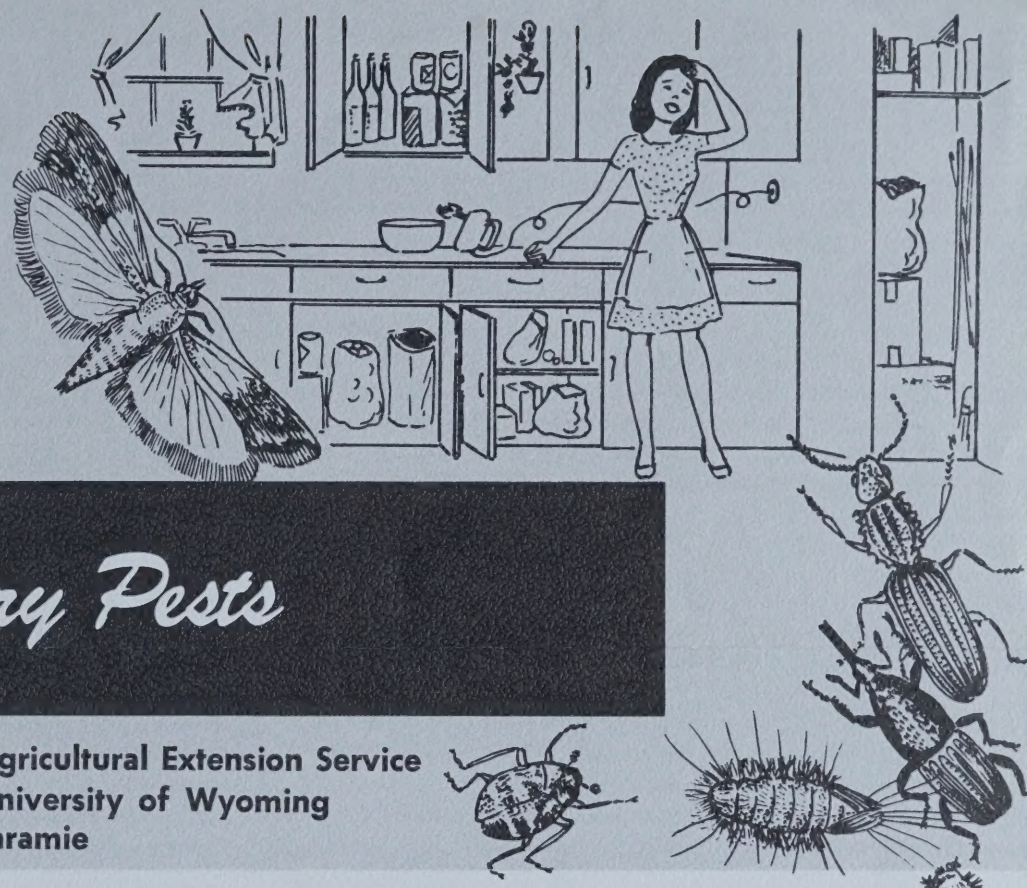

Pantry Pests

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Description

Ever since man first attempted to store food products, certain insect pests have made his effort difficult. Beetles have been found in ancient Egyptian tombs dating back to the dawn of history. Today's housewife also is often plagued with pantry pests.

Probably few things annoy the housewife more than the realization that cereals, flour, spices and similar products resting on her pantry shelves show "signs of life". Yet this is a common experience and something that may occur in every home.

Food products that become infested include cornmeal, dried fruits, nut meats, chocolate, certain spices, crackers and cookies. Commercially prepared dry dog and cat food is one of the biggest sources of insect infestations in many households.

The most common pantry pests of home stored foods are flour beetles, saw-toothed grain beetles, lesser grain beetles, Indian meal moths, and granary and rice weevils.

Carpet beetles or dermestids, perhaps the most frequent invader of the home, are scavengers. The specific kind of carpet beetle found depends largely on the protein content of the food available. These beetles feed on all types of grain and grain products, dried milk, leather, hair and hair products, feathers and bodies of dead insects or small animals such as mice.

Beetles range from 1/8 to 3/16 inch in length. Their color may vary from reddish-yellow to brown or black and in addition, some beetles are covered with grey or white, yellow or reddish scales and hair. The life history of each dermestid varies. The larvae are long and narrow, rarely exceeding 1/4 inch in length. The black carpet beetle larvae are cigar shaped ending with the long characteristic tuft of hairs. They also have short stiff hairs covering the body and are usually dark brown.

The confused flour beetle is a frequent invader of the home. It got its name because it is so easily mistaken for the related rust red flour beetle. The confused flour beetle or "bran bug" feeds on broken grain and grain dust and is one of the worst pests in flour mills, It is about 1/8 inch long and reddish brown in color. Females may live a year or more, dropping up to 500 eggs. It infests flour, breakfast food and other starchy materials.

The saw-toothed grain beetle is commonly found in cereal products and cupboards and is another member of the bran bug group. These insects do not damage whole grain, but feed on grain fragments. They are usually found around the cupboard where flour or sugar has spilled during cooking. They are dark brown, flattened,

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slender insects about 1/10 inch long. When examined under a hand lens, six saw-tooth-like projections are seen on each side of the thorax just back of the head. These tiny insects live about 10 months. The females lay from 45 to 285 eggs during their lifetime.

The lesser grain beetle is another common household cereal pest. It looks very much like the confused flour beetle, but is much smaller measuring about 1/32 inch long. It is usually dark brown or black in color. Both the adult and larval forms feed on whole grain or flour. Females lay from 200 to 500 eggs, dropping them in flour and grain.

The Indian meal moth is one of the most troublesome moths infesting stored foods. Infested material is more or less webbed together and often fouled with dirty silken masses containing the discharge of the larvae. It attacks nearly every cereal product and, nearly always, infestations in the home can be traced to dog food. This moth has a wingspread of about 3/4 inch. The outer two-thirds of the wings are reddish brown. The larval forms are white with a distinct greenish or pinkish tinge; they have a light brown head. The females normally lay about 200 eggs.

The granary weevil and rice weevil are very similar in appearance and habits and are the true weevils or snout beetles. The adult beetles are 1/8 inch long, dark brown to black, cylindrical, with rather long snouts or beaks. The larvae are white, legless grubs. These insects prefer whole grains but will also feed on spaghetti, macaroni and similar foods.

Control

At present practicing sanitation is the best method of control. Controlling insect pests in stored food products, therefore, should include the following steps:

Inspection — The housewife should inspect and clean her pantry area and supplies periodically and should discard infested food products or feed them immediately to birds, pets, or chickens. Products very lightly infested, or those not appearing infested but stored in the same cupboard or shelf, should be sterilized and placed in tight containers as described below. Before purchasing, check packages of food for breaks. Pests may get into the food at the store and "hitch-hike" into your home.

Sterilization by heat — Insects in most dried food products can be killed by heating them in the oven at about 140° F for half an hour or freezing for four days. Small packages can be heated just as they are. The contents of larger packages should be spread on cake or pie pans or baking sheets, so that the heat can penetrate easily. If there is any question about the product being infested, give it the heat treatment or discard it. It is usually easier to discard infested products (if in small quantities) than to attempt to salvage them by freezing or heating.

Cleaning — Food gets spilled and particles sift out of packages. This food stays on the shelves or lodges in cracks and corners. Insects can live in this material and get into food which may be placed on the shelves later.

Thoroughly clean the cupboard and storage bins of all refuse material. A vacuum cleaner does and excellent job of picking up dry particles from corners and crevices. Be sure to clean out the cracks along the shelves and top of the cupboard. Scrub these areas with strong detergent, adding a little household disinfectant.

Storage — Store uninfested or heat-sterilized dry foods in clean metal or glass containers with tight fitting lids. Shortening cans, coffee cans, or fruit jars are useful. The cover must fit tightly to prevent tiny insects from crawling in. Before re-using a container that has held infested food, heat the container in boiling water or in the oven.

Supplies — Whenever possible, purchase susceptible foods in quantities small enough that they are used within a reasonable length of time.

Insecticide Treatment — Remove all packages of food and avoid contamination of any foods or utensils.

After a thorough cleaning, spray the shelves, baseboards, walls and top of the cupboards or other infested areas with one of the following commercially available, ready-to-use household sprays: **Diazinon, Lindane, or Malathion.** Be sure all crevices and construction joints are thoroughly wetted with the insecticide.

A paint brush may be used to apply the insecticide to the infested areas, such as shelves and sides of cupboards. Work the solution into all crevices, and when the solution dries, cover the shelves with clean paper or foil before returning food packages to the cupboard. Do not apply to counter tops where food is handled.

Precautions

Follow the directions and heed all precautions on container labels. Keep insecticides in closed, well-labeled containers, in a dry place where they will not contaminate food or feed, and where children and pets cannot reach them. Keep them separate from food and feed storage areas.

To simplify information, when trade names of products are used, it is with the understanding that no discrimination is intended and no endorsement implied by the Wyoming Agricultural Extension Service.

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